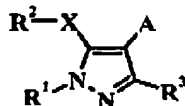


LISTING OF CLAIMS

1. (Previously Amended) A method for the treatment of human immunodeficiency virus (HIV) infection comprising administering a therapeutically effective amount of a compound of the formula



wherein

R¹ is optionally substituted C₁₋₁₂-alkyl, C₃₋₈-cycloalkyl, acyl, C₁₋₄-alkylsulfonyl, optionally substituted phenylsulfonyl, aryl, heterocyclyl or C₁₋₄-alkyl substituted with optionally substituted phenyl;

R² is aryl;

R³ is C₁₋₁₂-alkyl or C₁₋₄-alkoxy-C₁₋₄-alkyl;

A is a group selected from CH₂-(aryl-C₁₋₄-alkylamino), CH₂-(aryl-C₁₋₄-alkoxy), CH₂-(heterocyclyl-C₁₋₄-alkoxy), C₁₋₄-alkyl substituted with aryl or with heterocyclyl; or

A is a group of formula CH₂-U-heterocyclyl,
wherein U is O, S or NR'', wherein R'' is hydrogen or C₁₋₄-alkyl; or

A is a group of formula CH(V)Z,
wherein V is OH or F, and
wherein Z is aryl or heterocyclyl; or

A is a group of formula CH=CHW,
wherein W is aryl or heterocyclyl;

X is S or O;

or the pharmaceutically acceptable hydrolyzable esters or ethers thereof, or the pharmaceutically acceptable salts thereof.

2. (Original) The method of claim 1 wherein

R¹ is optionally substituted C₁₋₁₂-alkyl, C₃₋₈-cycloalkyl, acyl, C₁₋₄-alkylsulfonyl, optionally substituted phenylsulfonyl, aryl, heterocyclyl or C₁₋₄-alkyl substituted with optionally substituted phenyl, wherein the substituted C₁₋₁₂-alkyl is substituted with 1-5 substituents selected from fluorine, chlorine and bromine, and wherein the substituted phenyl is substituted with 1-5 substituents selected from C₁₋₄-alkyl, C₁₋₄-alkoxy, hydroxy, fluorine, chlorine, bromine and cyano;

R² is optionally substituted phenyl, wherein the substituted phenyl is substituted with 1-5 substituents selected from C₁₋₄-alkyl, C₁₋₄-alkoxy, hydroxy, fluorine, chlorine, bromine, cyano and nitro;

A is a group selected from CH₂-(aryl-C₁₋₄-alkylamino), CH₂-(aryl-C₁₋₄-alkoxy), CH₂-(heterocyclyl-C₁₋₄-alkoxy), C₁₋₄-alkyl substituted with aryl or heterocyclyl, wherein the aryl is optionally substituted with 1-5 substituents selected from C₁₋₄-alkyl, C₁₋₄-alkoxy, hydroxy, fluorine, chlorine, bromine, cyano, S-C₁₋₄-alkyl and NRR', wherein R and R' are independently of each other hydrogen or C₁₋₄-alkyl and the heterocyclyl is optionally substituted with 1-4 substituents selected from C₁₋₄-alkyl, C₁₋₄-alkoxy, hydroxy, fluorine, chlorine, bromine, cyano, S-C₁₋₄-alkyl and NRR', wherein R and R' are independently of each other hydrogen or C₁₋₄-alkyl; or

A is a group of formula CH₂-U-heterocyclyl, wherein the heterocyclyl is optionally substituted with 1-4 substituents selected from C₁₋₄-alkyl, fluorine, chlorine, bromine, cyano, nitro and NRR', wherein R and R' are independently of each other hydrogen or C₁₋₄-alkyl; or

A is a group of formula CH(V)Z,
wherein V is OH or F, and
wherein Z is aryl or heterocyclyl; or

A is a group of formula CH=CHW,
wherein W is unsubstituted aryl, unsubstituted heterocyclyl, aryl substituted with 1-5 substituents selected from C₁₋₄-alkyl, C₁₋₄-alkoxy, hydroxy, cyano, fluorine, chlorine and bromine, or

heterocyclyl substituted with 1-4 substituents selected from C₁₋₄-alkyl, C₁₋₄-alkoxy, hydroxy, cyano, fluorine, chlorine and bromine.

3. (Original) The method of claim 1 wherein

R¹ is optionally substituted C₁₋₁₂-alkyl, C₃₋₈-cycloalkyl, aryl, heterocyclyl or C₁₋₄-alkyl substituted with phenyl, wherein the C₁₋₁₂-alkyl is substituted with 1-5 fluorine substituents;

R² is phenyl substituted with 1-5 substituents selected from C₁₋₄-alkyl, C₁₋₄-alkoxy, fluorine, chlorine, bromine, cyano and nitro;

A is a group selected from CH₂-(aryl-C₁₋₄-alkoxy), CH₂-(heterocyclyl-C₁₋₄-alkoxy), C₁₋₄-alkyl substituted with phenyl or heterocyclyl, wherein the phenyl is optionally substituted with 1-5 substituents selected from C₁₋₄-alkyl, C₁₋₄-alkoxy, hydroxy, fluorine, chlorine, bromine, cyano, S-C₁₋₄-alkyl and NRR', and the heterocyclyl is optionally substituted with 1-4 substituents selected from C₁₋₄-alkyl, C₁₋₄-alkoxy, hydroxy, fluorine, chlorine, bromine, cyano, S-C₁₋₄-alkyl and NRR', wherein R and R' are independently of each other hydrogen or C₁₋₄-alkyl; or

A is a group of formula CH₂-U-heterocyclyl,

wherein the heterocyclyl is optionally substituted with 1-4 substituents selected from C₁₋₄-alkyl, fluorine, chlorine, bromine, cyano, nitro and NRR', wherein R and R' are independently of each other hydrogen or C₁₋₄-alkyl; or

A is a group of formula CH(V)heterocyclyl,

wherein V is OH or F; or

A is a group of formula CH=CHW,

wherein W is aryl optionally substituted with 1-5 substituents selected from C₁₋₄-alkyl, C₁₋₄-alkoxy, hydroxy, cyano, fluorine, chlorine and bromine.

4. (Original) The method according to claim 1 wherein

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R¹ is optionally substituted C₁₋₇-alkyl, C₃₋₈-cycloalkyl, aryl, heterocyclyl or C₁₋₄-alkyl substituted with phenyl, wherein the C₁₋₇-alkyl is substituted with 1-3 fluorine substituents;

R² is phenyl substituted with 1-3 substituents selected from C₁₋₄-alkyl, C₁₋₄-alkoxy, fluorine, chlorine, bromine, cyano and nitro;

R³ is C₁₋₇-alkyl or C₁₋₄-alkoxy-C₁₋₂-alkyl;

A is a group selected from CH₂-(phenyl-C₁₋₂-alkoxy), CH₂-(pyridyl-C₁₋₂-alkoxy), C₁₋₂-alkyl substituted with phenyl or with heterocyclyl, wherein the phenyl is optionally substituted with 1-3 substituents selected from C₁₋₄-alkyl, C₁₋₄-alkoxy, hydroxy, fluorine, chlorine, bromine, cyano, S-C₁₋₄-alkyl and NRR', and the heterocyclyl is optionally substituted with 1-2 substituents selected from C₁₋₄-alkyl, C₁₋₄-alkoxy, hydroxy, fluorine, chlorine, bromine, cyano, S-C₁₋₄-alkyl and NRR', wherein R and R' are independently of each other hydrogen or C₁₋₄-alkyl; or

A is a group of formula CH₂-U-heterocyclyl,

wherein heterocyclyl is optionally substituted with 1-2 substituents selected from C₁₋₄-alkyl, fluorine, chlorine, bromine, cyano, nitro and NRR', wherein R and R' are independently of each other hydrogen or C₁₋₄-alkyl; or

A is a group of formula CH(F)heterocyclyl.

5. (Original) The method according to claim 1 wherein

R¹ is optionally substituted C₁₋₇-alkyl, C₃₋₆-cycloalkyl, phenyl, pyridyl or benzyl, wherein the C₁₋₇-alkyl is substituted with 1-3 fluorine substituents;

R² is phenyl substituted with 1-3 substituents selected from C₁₋₂-alkyl, fluorine, chlorine and cyano;

R³ is C₁₋₇-alkyl or C₁₋₂-alkoxy-C₁₋₂-alkyl;

A is a group selected from CH_2 -(phenyl- C_{1-2} -alkoxy), CH_2 -(pyridyl- C_{1-2} -alkoxy), C_{1-2} -alkyl substituted with phenyl or with heterocyclyl, wherein the phenyl is optionally substituted with 1-3 substituents selected from C_{1-2} -alkyl, C_{1-2} -alkoxy, hydroxy, fluorine, chlorine, bromine, cyano, S- C_{1-2} -alkyl and NRR' , and the heterocyclyl is optionally substituted with 1-2 substituents selected from C_{1-2} -alkyl, C_{1-2} -alkoxy, hydroxy, fluorine, chlorine, bromine, cyano, S- C_{1-2} -alkyl and NRR' , wherein R and R' are independently of each other hydrogen or C_{1-2} -alkyl; or

A is a group of formula $\text{CH}(\text{F})\text{heterocyclyl}$.

6. (Original) The method according to claim 1 wherein

R^1 is C_{1-7} -alkyl;

R^2 is phenyl substituted with 1-3 substituents selected from chlorine and cyano;

R^3 is C_{1-7} -alkyl; and

A is a group selected from CH_2 -(phenyl- C_{1-2} -alkoxy), CH_2 -(pyridyl- C_{1-2} -alkoxy), C_{1-2} -alkyl substituted with heterocyclyl, wherein the heterocyclyl is optionally substituted with 1-2 substituents selected from C_{1-2} -alkyl, C_{1-2} -alkoxy, hydroxy, fluorine, chlorine, bromine, cyano, S- C_{1-2} -alkyl and NRR' , wherein R and R' are independently of each other hydrogen or C_{1-2} -alkyl.

7. (Original) The method according to claim 1 wherein

R^1 is C_{1-4} -alkyl;

R^2 is phenyl substituted with 1-3 chlorine substituents;

R^3 is C_{1-4} -alkyl; and

A is a group C_{1-2} -alkyl substituted with heterocyclyl, wherein the heterocyclyl is optionally substituted with 1-2 substituents selected from C_{1-2} -alkyl and chlorine.

8. (Original) The method according to claim 1 wherein

R¹ is ethyl or iso-propyl;

R² is 3,5-dichlorophenyl;

R³ is methyl; and

A is a group C_{1,2}-alkyl substituted with heterocyclyl, wherein the heterocyclyl is optionally substituted with 1-2 selected from C_{1,2}-alkyl and chlorine; and

X is S.

9. (Original) The method according to claim 1 wherein X is S.

10. (Original) The method according to claim 1 wherein the compound is

5-(3-Chlorophenylthio)-3-methoxymethyl-1-methyl-4-styryl-1H-pyrazole,

(E)-5-(3,5-Dichlorophenylthio)-3-(methoxymethyl)-1-phenyl-4-styryl-1H-pyrazole,

5-(3,5-Dichlorophenylthio)-3-methyl-1-phenyl-4-styryl-1H-pyrazole,

4-Benzyl-5-(3,5-dichlorophenylthio)-3-methyl-1-phenyl-1H-pyrazole,

5-(3,5-Dichlorophenylthio)-3-methyl-4-(2-phenylethyl)-1-phenyl-1H-pyrazole,

5-(3,5-Dichlorophenylthio)-3-(methoxymethyl)-1-phenyl-4-(2-phenylethyl)-1H-pyrazole,

[5-(3,5-Dichlorophenylthio)-3-(methoxymethyl)-1-methyl-1H-pyrazol-4-yl]-phenyl-methanol,

[5-(3,5-Dichlorophenylthio)-3-methyl-1-phenyl-1H-pyrazol-4-yl]-phenyl-methanol,

[5-(3,5-Dichlorophenylthio)-1-ethyl-3-(methoxymethyl)-1H-pyrazol-4-yl]-phenyl-methanol,

4-Benzyl-5-(3,5-dichlorophenylthio)-1-ethyl-3-(methoxymethyl)-1H-pyrazole,

4-Benzyl-5-(3,5-dichloro-phenylthio)-3-methoxymethyl-1-methyl-1H-pyrazole,

5-(3,5-Dichlorophenylthio)-3-methyl- α -(RS)-phenyl-1H-pyrazole-4-methanol,

1,4-Dibenzyl-5-(3,5-dichlorophenylthio)-3-methyl-1H-pyrazole,

4-Benzyl-5-(3,5-dichloro-phenylthio)-1-isopropyl-3-methyl-1H-pyrazole,

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4-Benzyl-5-(3,5-dichlorophenylthio)-1-ethyl-3-methyl-1H-pyrazole,
4-Benzyl-1-sec-butyl-5-(3,5-dichlorophenylthio)-3-methyl-1H-pyrazole,
4-[5-(3,5-Dichlorophenylthio)-3-methyl-1-phenyl-4-[(4-pyridyl)methyl]-1H-pyrazole,
5-(3,5-Dichlorophenylthio)-1-ethyl-3-methyl-4-(2-phenylethyl)-1H-pyrazole,
4-[5-(3,5-Dichlorophenylthio)-1-ethyl-3-methyl-[(4-pyridyl)methyl]-1H-pyrazole,
4-Benzyl-1-ethyl-5-(4-methoxyphenoxy)-3-methyl-1H-pyrazole,
4-Benzyl-1-cyclopentyl-5-(3,5-dichlorophenylthio)-3-methyl-1H-pyrazole,
4-Benzyl-1-cyclohexyl-5-(3,5-dichlorophenylthio)-3-methyl-1H-pyrazole,
4-Benzyl-5-(3,5-dichlorophenylthio)-1-isobutyl-3-methyl-1H-pyrazole,
4-Benzyl-5-(3,5-dichlorophenylthio)-3-methyl-1-phenyl-1H-pyrazole,
2-[4-Benzyl-5-(3,5-dichloro-phenylsulfanyl)-3-methyl-pyrazol-1-yl]-pyridine,
4-Benzyl-3-methyl-5-(3-nitro-phenoxy)-1-phenyl-1H-pyrazole,
3-(4-Benzyl-5-methyl-2-phenyl-2H-pyrazol-3-yloxy)-benzonitrile,
2-[5-(3,5-Dichloro-phenylsulfanyl)-1-isopropyl-3-methyl-1H-pyrazol-4-ylmethyl]-pyridine,
4-Benzyl-5-(3,5-dichloro-phenylsulfanyl)-1-isopropyl-3-methyl-1H-pyrazole,
2-[5-(3,5-Dimethyl-phenylsulfanyl)-1-isopropyl-3-methyl-1H-pyrazol-4-ylmethyl]-pyridine,
2-[5-(3-Chloro-phenylsulfanyl)-1-isopropyl-3-methyl-1H-pyrazol-4-ylmethyl]-pyridine,
2-[5-(3,5-Dichloro-phenylsulfanyl)-1-isopropyl-3-methyl-1H-pyrazol-4-ylmethoxy]-pyridine,
3-Chloro-5-[5-(3,5-dichloro-phenylsulfanyl)-1-isopropyl-3-methyl-1H-pyrazol-4-ylmethoxy]-pyridine,
1-[5-(3,5-Dichloro-phenylsulfanyl)-1-isopropyl-3-methyl-1H-pyrazol-4-ylmethyl]-1H-pyridin-2-one,
3-[5-(3,5-Dichloro-phenylsulfanyl)-1-ethyl-3-methyl-1H-pyrazol-4-ylmethyl]-pyridine,
3-[5-(3,5-Dichloro-phenylsulfanyl)-1-isopropyl-3-methyl-1H-pyrazol-4-ylmethyl]-3H-pyrimidin-4-one,
4-[5-(3,5-Dichloro-phenylsulfanyl)-1-isopropyl-3-methyl-1H-pyrazol-4-ylmethoxymethyl]-pyridine,
3-(4-Benzyl-5-methyl-2-phenyl-2H-pyrazol-3-ylsulfanyl)-benzonitrile,
3-[5-(3,5-Dichloro-phenylsulfanyl)-1-isopropyl-3-methyl-1H-pyrazol-4-ylmethyl]-pyridine,
[5-(3,5-Dichloro-phenylsulfanyl)-1-isopropyl-3-methyl-1H-pyrazol-4-yl]-pyridin-2-yl-methanol,
[5-(3,5-Dichloro-phenylsulfanyl)-1-isopropyl-3-methyl-1H-pyrazol-4-yl]-pyridin-4-yl-methanol,
4-[5-(3,5-Dichloro-phenylsulfanyl)-1-isopropyl-3-methyl-1H-pyrazol-4-ylmethyl]-pyridine,
4-[5-(3,5-Dichloro-phenylsulfanyl)-1-isopropyl-3-methyl-1H-pyrazol-4-ylmethylsulfanyl]-pyridine,
4-Benzyl-5-(3,5-dichloro-phenylsulfanyl)-3-methyl-1-(2,2,2-trifluoro-ethyl)-1H-pyrazole,
4-[[5-(3,5-Dichloro-phenylsulfanyl)-1-isopropyl-3-methyl-1H-pyrazol-4-yl]-fluoro-methyl]-pyridine,
5-[5-(3,5-Dichloro-phenylsulfanyl)-1-ethyl-3-methyl-1H-pyrazol-4-ylmethoxy]-2-methyl-pyridine,
5-Bromo-4-[5-(3,5-dichloro-phenylsulfanyl)-1-isopropyl-3-methyl-1H-pyrazol-4-ylmethyl]-pyrimidine,

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3-[5-(3,5-Dichloro-phenylsulfanyl)-1-ethyl-3-methyl-1H-pyrazol-4-ylmethoxy]-2-nitro-pyridine,
4-[5-(3,5-Dichloro-phenylsulfanyl)-1-ethyl-3-methyl-1H-pyrazol-4-ylmethylsulfanyl]-pyridine,
4-[5-(3,5-Dichloro-phenylsulfanyl)-1-ethyl-3-methyl-1H-pyrazol-4-ylmethoxy]-pyridine,
4-[5-(3,5-Dichloro-phenylsulfanyl)-1-isopropyl-3-methyl-1H-pyrazol-4-ylmethyl]-pyrimidine,
3-[5-(3,5-Dichloro-phenylsulfanyl)-1-ethyl-3-methyl-1H-pyrazol-4-ylmethoxy]-pyridin-2-ylamine,
4-[5-(3,5-Dichloro-phenylsulfanyl)-1-isopropyl-3-methyl-1H-pyrazol-4-ylmethoxy]-pyridine,
4-[5-(3,5-Dichloro-phenylsulfanyl)-1-isopropyl-3-methyl-1H-pyrazol-4-ylmethyl]-3-fluoro-pyridine,
4-[5-(3,5-Dichloro-phenylsulfanyl)-1-ethyl-3-methyl-1H-pyrazol-4-ylmethyl]-3-fluoro-pyridine,
3-Chloro-4-[5-(3,5-dichloro-phenylsulfanyl)-1-ethyl-3-methyl-1H-pyrazol-4-ylmethyl]-pyridine,
3-Chloro-4-[5-(3,5-dichloro-phenylsulfanyl)-1-isopropyl-3-methyl-1H-pyrazol-4-ylmethyl]-pyridine,
4-[5-(3,5-Dichloro-phenylsulfanyl)-1-ethyl-3-methyl-1H-pyrazol-4-ylmethoxy]-6-methyl-pyrimidin-2-ylamine,
3-Bromo-5-[5-(3,5-dichloro-phenylsulfanyl)-1-ethyl-3-methyl-1H-pyrazol-4-ylmethyl]-pyridine,
[5-(3,5-Dichloro-phenylsulfanyl)-1-ethyl-3-methyl-1H-pyrazol-4-ylmethyl]-pyridin-3-yl-amine,
4-[5-(3,5-Dichloro-phenylsulfanyl)-1-isopropyl-3-methyl-1H-pyrazol-4-ylmethyl]-benzonitrile,
2-Chloro-4-[5-(3,5-dichloro-phenylsulfanyl)-1-isopropyl-3-methyl-1H-pyrazol-4-ylmethyl]-pyridine,
2-Chloro-4-[5-(3,5-dichloro-phenylsulfanyl)-1-isopropyl-3-methyl-1H-pyrazol-4-ylmethyl]-6-methyl-pyridine,
2-[5-(3,5-Dichloro-phenylsulfanyl)-1-isopropyl-3-methyl-1H-pyrazol-4-ylmethyl]-pyrazine,
4-[5-(3-Chloro-5-methoxy-phenylsulfanyl)-1-isopropyl-3-methyl-1H-pyrazol-4-ylmethyl]-2-methoxy-pyridine,
3-[[5-(3,5-Dichlorophenylthio)-3-methyl-1-phenyl-1H-pyrazol-4-yl]methyl]-2-(methylthio)pyridine,
4-[5-(3-Bromo-phenylsulfanyl)-1-isopropyl-3-methyl-1H-pyrazol-4-ylmethyl]-3-chloro-pyridine,
3-Chloro-4-(1-isopropyl-3-methyl-5-m-tolylsulfanyl-1H-pyrazol-4-ylmethyl)-pyridine,
3-Chloro-4-[5-(3,5-dimethyl-phenylsulfanyl)-1-isopropyl-3-methyl-1H-pyrazol-4-ylmethyl]-pyridine,
4-[5-(3-Bromo-phenylsulfanyl)-1-isopropyl-3-methyl-1H-pyrazol-4-ylmethyl]-3-fluoro-pyridine,
3-Fluoro-4-(1-isopropyl-3-methyl-5-m-tolylsulfanyl-1H-pyrazol-4-ylmethyl)-pyridine,
4-[5-(3,5-Dimethyl-phenylsulfanyl)-1-isopropyl-3-methyl-1H-pyrazol-4-ylmethyl]-3-fluoro-pyridine,
5-(3,5-Dichloro-phenylsulfanyl)-1-isopropyl-3-methyl-4-thiophen-3-ylmethyl-1H-pyrazole,
{3-[5-(3,5-Dichloro-phenylsulfanyl)-1-isopropyl-3-methyl-1H-pyrazol-4-ylmethyl]-phenyl}-dimethyl-amine,
4-[5-(3,5-Dichloro-phenylsulfanyl)-1-isopropyl-3-methyl-1H-pyrazol-4-ylmethyl]-3,5-dimethyl-isoxazole, or
6-[5-(3,5-Dichloro-phenylsulfanyl)-1-isopropyl-3-methyl-1H-pyrazol-4-ylmethyl]-pyridine-2-carbonitrile.

11. (Original) The method according to claim 1 wherein

R¹ is C₁₋₁₂-alkyl, C₃₋₈-cycloalkyl, acyl, C₁₋₄-alkylsulfonyl, optionally substituted phenylsulfonyl, aryl or C₁₋₄-alkyl substituted with optionally substituted phenyl, wherein the substituted phenyl is substituted with 1-5 substituents selected from C₁₋₄-alkyl, C₁₋₄-alkoxy, hydroxy, fluorine, chlorine and bromine;

R² is aryl or optionally substituted phenyl, wherein the substituted phenyl is substituted with 1-5 substituents selected from C₁₋₄-alkyl, C₁₋₄-alkoxy, hydroxy, fluorine, chlorine and bromine;

R³ is C₁₋₁₂-alkyl or C₁₋₄-alkoxy-C₁₋₄-alkyl;

A is a group selected from CH₂-(aryl-C₁₋₄-alkylamino), CH₂-(aryl-C₁₋₄-alkoxy), C₁₋₄-alkyl substituted with aryl or with heterocyclyl, wherein the aryl is optionally substituted with 1-5 substituents selected from C₁₋₄-alkyl, C₁₋₄-alkoxy, hydroxy, fluorine, chlorine and bromine and the heterocyclyl is optionally substituted with 1-4 substituents and the substituents are selected from C₁₋₄-alkyl, C₁₋₄-alkoxy, hydroxy, fluorine, chlorine and bromine; or

A is a group of formula CH(OH)Z,

wherein Z is aryl or heterocyclyl; or

A is a group of formula CH=CHW,

wherein W is aryl or heterocyclyl, wherein the aryl is optionally substituted with 1-5 substituents selected from C₁₋₄-alkyl, C₁₋₄-alkoxy, hydroxy, fluorine, chlorine and bromine and the heterocyclyl is optionally substituted with 1-4 substituents selected from C₁₋₄-alkyl, C₁₋₄-alkoxy, hydroxy, fluorine, chlorine and bromine.

12-21. (Canceled)

22. (Original) A pharmaceutical composition comprising a pharmaceutically effective amount of a compound according to claim 1 and a pharmaceutically inert carrier.